Hatchery Highlights

U.S. Fish and Wildlife Service Iron River NFH **News and Updates**



Winter 2006

Topics this month: *Retiring Brood

*Spawning Summary

*Tagging WCNWR Coasters

*Friends Group Winter Outing

*Math Class Sample Count Eggs

*Fin Clipping

*Sportswomen's Group Help Spawn

*Tagging Coaster Brook Trout Brood

MERRY CHRISTMAS LAKERS!



The brood were netted out of the tanks and sent down the tube into Lake Superior.

On a bright and chilly day in December, 370 adult lake trout were released at the shores of beautiful Lake Superior. Staff from the Iron River National Fish Hatchery loaded the trout at the hatchery and stocked them near Port Wing, WI. The trout averaged between 20 and 28 inches in length and weighed about five pounds each. Each fish had a right ventral fin removed and also some had their adipose fin clipped. The fish were stocked for several reasons: 1) the broodstock rearing facility where these fish were kept is nearing capacity and cannot handle any additional lake trout; 2) the current demand for lake trout eggs do not require the hatchery to maintain these broodstock any longer; and, 3) broodstock reductions allow for the expansion of preferred strains to better suit program goals. The stocking of surplus fish is beneficial to the fish and to the local community. Stocking in mid-December brings

about many challenges, from frozen equipment to iced fingers. This was truly a unique experience in that traditional

distribution is carried out in spring to early summer when the weather is somewhat warmer and not hovering around 0 degrees F!

BIOLOGIST GOES BACK TO SCHOOL

On November 18th, 2005, Fishery Biologist Angela Baran went to Ashland Middle School with eyed lake trout eggs in tow! Seventh grade math teacher, Kathy Sill is trying to get students to realize that math is used everyday in many jobs. The students were able to perform sample counts on the eggs by displacing water in a graduated cylinder. After calculating the number of eggs in a milliliter, they were then able to calculate how many eggs were on station at the Iron River National Fish Hatchery. Once the students got over their initial "eewww that's gross" reaction, they were fascinated by the eyes of the fry moving inside the eggs. The comments then turned to "can we touch the eggs?" and questions of what we do with the fish and eggs at the hatchery. There were also many questions of how to get a job at a hatchery... so hopefully we will be seeing some of those students in the Fish and Wildlife Service!!



These students are counting eggs into the graduated cylinder to get a sample count of the eggs.

2005 SPAWNING FINALE AND EGG DEPARTURES FROM IRON RIVER NFH

The Iron River NFH is a combination brood stock and production facility tasked with rearing lake trout and coaster brook trout to restore depleted trout populations in the Upper Great Lakes. This fall, 760 mature lake trout from three different strains, (Apostle Island, Traverse Island, and Isle Royale), produced 4.8 million green eggs for restoration purposes. Of these, 3.5 million reached the eyed egg stage with 2 million to be raised at this hatchery to the fingerling and yearling stages. In addition, Seneca Lake strain eggs are imported from Sullivan's Creek NFH. On the export side, we transferred 514,000 eyed eggs to White River NFH, 467,000 to Jordan River NFH, and 98,000 to Keweenaw Bay Tribal Hatchery. This year's lake trout spawning season ran from late September through October. Also this fall, 1,455 coaster brook trout were spawned from late October through mid December, producing 1.75 million green eggs. Over 1.2 million survived to the eyed egg stage and approximately 430,000 of these will be kept and reared at the hatchery to provide fry and fingerlings for various restoration projects. We shipped 7,700 eyed eggs to Keweenaw Bay Tribal Hatchery, 50,000 to Whittlesey creek, 104,000 to Genoa NFH, and another 101,000 to the Grand Portage Tribal Fisheries program. Overall, it was another successful season with fish and crews working together cooperatively to produce the highest quality lake trout and brook trout possible for continued restoration activities in the Upper Great Lakes.

FINAL WRAP UP FOR FIN CLIPPING AT IRON RIVER NFH

The numbers are finally in! About 1.38 million lake trout were effortlessly marked using a year specific fin clip for 2006. Approximately 86,000 fish, destined for Lake Superior, had a right pectoral fin removed. The remaining fish had a left pectoral fin removed and are destined for Lakes Michigan and Huron. From mid December through February, fin clipping was performed by a crew of seven dedicated employees who individually handled all fish to be stocked. This clipping process allows biologist and anglers to correctly differentiate between hatchery fish and their wild counterparts in the Great Lakes. The clipping season lasted 50 days with about 25,000 trout clipped per day. Iron River National Fish Hatchery, in collaboration with other fish hatcheries, annually stock 3.9 million yearling lake trout into the upper Great Lakes. This stocking will begin in early April and will hopefully finish by the 4th of July.

COASTER BROOK TROUT RECEIVE IMPLANTS



The arrow shows the elastomer tag in this coaster brook trout.

During the first week of March 2006, Coaster brook trout yearlings destined for Whittlesey Creek were implanted with Northwest Marine Technology, Inc. Visual Implant Elastomer (VIE) tags. Staff from the Whittlesey Creek National Wildlife Refuge, and the Ashland Fisheries Resource Office joined Iron River staff to learn and then participate in the process. A total of 2,200 Coaster brook trout were tagged. This included 1,100 Tobin Harbor strain which received red tags and 1,100 Siskiwit strain which received green tags. All of the tagged yearling brook trout will be stocked into Whittlesey Creek this spring as part of an ongoing fish evaluation. We are hopeful that the tags will help biologists easily recognize these fish as coming from the Iron River National Fish Hatchery, and since we were able to use a unique color tag for each strain of fish, there will be no need to do an expensive genetic analysis to

determine the strain of fish captured. In addition, the strain determination will be immediate which will hopefully save time in the field. We will continue to work with the Whittlesey Creek NWR and the Ashland FRO to evaluate the retention success of the VIE tags in Coaster brook trout, and are hopeful that we will be able to use them in other evaluations in the future.

REEL WOMEN LEARN REEL FAST!

During November, five brave ladies from the local chapter of Lake Superior's Reel Women Sportswomen's Group volunteered to battle sub-freezing temperatures and less than desirable working conditions to assist with the collection of brook trout eggs. The chapter helped Iron River National Fish Hatchery staff collect approximately 163,000 eggs of the Siskiwit Bay strain and 182,000 Tobin Harbor strain coaster brook trout. Once collected, the eggs are transferred into egg incubation systems where they are monitored until hatch. All eggs collected will be used to aid ongoing coaster brook trout restoration efforts in Lake Superior. The coaster brook trout is native to Lake Superior and has a unique life history in that it spends most of its life out in the lake and prefers to spawn, in the fall, on shallow shorelines or in tributary streams. This assistance was provided during one week of an eight week spawning season that lasted well into the even colder month of December. We "reely" appreciated the outstanding help!!!!



The Reel Women are spawning female coaster brook trout.

FRIENDS TAKE A HIKE AND SKI

On A cold sunny day on February 12, 2006 the Friends of the Iron River National Fish Hatchery held a snowshoeing and cross-country skiing event. The public was invited to come out and explore recently cleared trails. Snowshoes, loaned by the Northern Great Lakes Visitor center, were provided to any participants that needed them. It turned out to be a perfect day for the event, the snow conditions were near ideal and temperatures were cold but comfortable. At the conclusion of the event the group met at the hatchery for hot chocolate and snacks. An increase in usage of the hatchery property for winter activities, such as snowshoeing, skiing, and hiking has been realized due to improvements of the trail system by the Friends Group. Future plans of the group include additional trail improvements, opening up new trails, and extending current trails.

BODY ART FOR COASTER BROOK TROUT



The needle is inserted just below the skin to inject the elastomer.

On March 1st, 2006, Iron River NFH gave the Tobin Harbor strain coaster brook trout brood "body art". The brook trout STW 04 year class was tagged using Northwest Marine Technology's Visible Implant Elastomer. After watching the instructional video provided by NMT, the hatchery staff and fin clipping crew first began injecting lake trout brood to practice on larger fish and then the brook trout brood. It only took a short period of time to feel comfortable with the process and in the end, the clipping crew tagged the 900 fish in the brood lot within 2 hours. Over the next couple years, we will be evaluating how well the tags were maintained and which combination of site and color works best. Currently Iron River National Fish Hatchery has six distinct genetic groups of the Tobin Harbor strain of coaster brook trout. A reliable marking scheme is critical to distinguish each group. Clipping numerous fins to mark groups is

complicated by fin re-growth or fin erosion. In addition, these fish look less pleasing to the public when retired and enter the sport fishery. The use of Elastomer tagging could eventually eliminate the numerous clips on brood fish and provide a more accurate system of identifying brood fish by employing a possibility of 10 different colors that can be injected into various locations on the fish.



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